US ERA ARCHIVE DOCUMENT

EFB Log Out Date: MAR 15 1933 Init .: (MY To: Curtis Laird Ecological Effects Branch Hazard Evaluation Division (TS-769) Carolinthohitt From: Carolyn K. Offutt Head, Monitoring and Guidelines Section Environmental Fate Branch, HED (TS-769) Attached, please find the estimated environmental concentration review of: Reg./File No.:\_\_\_\_\_ Chemical: Acifluorfen Type Product: Herbicide Product Name: Tackle 2S Company Name: Rhone-Poulenc Submission Purposes: EEC ZBB Code: Other Action Code: ----Date In: 18 Feb 1983 EFB#:\_\_\_\_\_ Date Completed: 15 Mar 1983 TAIS (Level II) Days 63 1 Deferrals To: XX Ecological Effects Branch

Residue Chemistry Branch

Toxicology Branch

Shaugh. No. 114402



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

MAR | 5 1983

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

To:

Curtis E. Laird

Ecological Effects Branch/HED

Subject:

Estimated Environmental Concentration for Tackle 2S

Thru:

Carolyn K. Offutt, Chief Carolylle/Intt
Monitoring and Guidelines Section
Environmental

Environmental Fate Branch/HED

We have reviewed your request of 18 Feb. 1983 for an estimated environmental concentration of Tackle 2S (sodium salt acifluorfen). This product action is for an EUP using Tackle 2S on soybeans.

We have reviewed our data from Rhone-Poulenc on this compound and have found it to be highly unacceptable and inadequate to perform an EEC using computer models.

From the application rate information, we can estimate that a direct application of 0.5 to 0.75 lb/A to a pond would yield 350 to 525 ppb in 6 inches of water. In a 2 meter deep pond this would yield 30 to 44 ppb maximum.

From an application to an adjacent field (10 ha), a catastrophic event of 10% runoff (R.D. Wauchope. 1978. J. Environ. Qual. 7: 459-472) would yield 0.55 to 0.84 kg entering a 1 ha pond, 2 m deep. This gives 27 to 42 ppb as a maximum estimated concentration in the pond. The rate of dissipation of the pesticide in the pond, however, can not be determined due to the lack of this type of data.

Robert W. Holst, Ph.D.

Plant Physiologist

Environmental Fate Branch Hazard Evaluation Division